

Responsible Conduct of Research

1 RCR Coursework

The Harvard T.H. Chan School of Public Health and its Department of Biostatistics emphasize the responsible conduct of research throughout all aspects of the research process. In accordance with NIH guidelines, the Chan School provides a course on RCR that is taken in the first year of doctoral programs. I took the Responsible Conduct of Research course in Spring 2014. This is a weekly, semester-long course that instructs students on how to appropriately and responsibly perform research throughout their careers. It encompasses all aspects of Human Subjects Research in addition to many other topics. The course's leader is the Associate Dean of Regulatory Affairs and Research Compliance.

The course is case-based, and includes a lecture component, course discussion among students and faculty and case studies. The course utilizes resource materials including articles, essays, and prepared cases from both theoretical and real examples. Students receive a certification of completion upon attending a minimum of six of eight two-hour lectures (16 instruction hours), interact in class discussions and complete twelve case-study assignments. Students are required to read the National Academy of Sciences publication "On Being a Scientist" and the ORI Introduction to the Responsible Conduct of Research. Topics of the course include human subject research regulations and guidelines, resource use, intellectual property, data management and ownership, research misconduct, conflict of interest, collaboration and mentorship, authorship and professional standards. The key course objectives include the ability to (i) describe concepts of research integrity, (ii) describe requirements for research practice, (iii) recognize deviations from these and (iv) describe practices that promote compliance.

2 CITI Training

I have also completed the Biomedical Research Investigators basic course of the Collaborative Institutional Training Initiative (CITI) program on three occasions. During my undergraduate research experience, I attended seminars on the responsible conduct of research at both Washington University in St. Louis and the University of North Carolina. At this time, I also completed the CITI course for the first time. I have since maintained my education on research integrity by completing the CITI training at the beginning of graduate school and at the beginning of collaborations on COPD with those at the Channing Institute of Brigham and Women's Hospital. The CITI program includes, but is not limited to, modules on the bioethics, records-based research, genetics research, collaborative research, data management, and healthcare-related privacy and information security provided by the Health Insurance Portability and Accountability Act (HIPAA). The course takes several hours to complete and includes modules with reading and videos followed by exams to test understanding. A score of 80% or higher on each module is required to pass. I will continue to use trainings yearly, including but not limited to CITI and academic courses, to reiterate my understanding of the responsible conduct of research.

3 Personal

In addition, in my individual and group meetings with my advisors Drs. Lin and Quackenbush, we discuss responsible conduct of research such as the topics of responsible authorship and ethics. I will continue to receive informal RCR training during research group meetings and advising meetings. In my graduate training my advisors have taught me about mentorship relationships and responsibilities, collaborative research, sharing and ownership of data, scientific reproducibility and the overall impact of scientific research. Dr. Silverman and additional collaborators can provide further guidance on RCR and share their experience in responsible biomedical research.